

Surgical Options for Recurrent Knee Instability

Some patients will develop recurrent patella dislocations after the first episode. If non-surgical treatment fails and the patella continues to slip out of the groove, surgery would then be recommended to stabilise the patella.

Surgeries can be broadly divided into soft tissue procedures and bony re-alignment procedures. Your doctor will advise you on the most ideal type of surgery.

Common Surgical Options

1. Medial Patello-Femoral Ligament (MPFL) Reconstruction

It involves taking one of your inner hamstring tendon or from a tissue bank and joining it onto the patella to recreate the torn ligament.

2. Release Tight Lateral Patella Tissue

3. Tibial Tuberosity Bony Transfers

This may be necessary if patient has significant bony deformity resulting in dislocation of the patella.

The degree of knee pain you experience after surgery depends on the severity of cartilage and bony damage from prior episodes of dislocation. Hence, it is advisable to consider surgery early if you encounter repeated episodes of patella dislocation.

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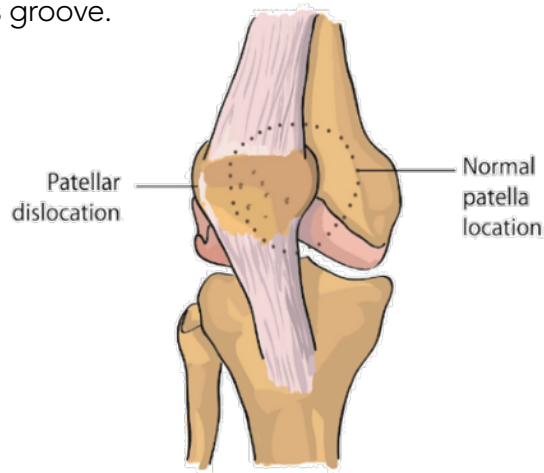
Department of
ORTHOPAEDIC SURGERY

PATELLAR DISLOCATION



The Knee Cap (Patella)

The patella is a flat triangular bone that lies in the front of the knee (kneecap). The patella is held by ligaments and muscles in the groove on the thigh bone. Patella dislocation, or dislocation of the kneecap, occurs when the patella moves out of its groove.



Common Facts About Patella Dislocation

- The patella usually dislocates outward.
- It is most common in adolescents
- It is usually caused by a direct impact to the patella or a twisting injury.
- May be linked to an osteochondral fracture.

Symptoms

- **Pain:** Usually felt along the inner regions of the kneecap. Occurs after extended sitting or after activity.
- **Swelling:** Usually comes on rapidly and is related to bleeding into the knee joint.

- **Deformity:** The patella may appear as a lump on the outside of the knee. It may pop back into its usual groove when you straighten your knee.
- **Instability:** You may lack the confidence to use the knee in future, as you may feel like it is about to give way during intensive leg activities.

Signs

- **Haemarthrosis:** Bleeding in the knee joint which results in a tense swelling in the knee. The swell may last for one to two weeks after the injury.
- **Tenderness:** Often felt in a localised area on the inner region of the patella. Usually related to the tearing of muscle and ligament attachments and sometimes fracture.
- **Flat Feet:** You may have associated flat feet, or generalised hypermobility of other joints in the body.

How is Patella Dislocation Diagnosed?

- **X-rays:** To confirm dislocation and check if there are any fractures at the inner region of the kneecap
- **Magnetic Resonance Imaging (MRI):** To look for fracture within the joint and to assess the severity of the injury
- **CT scan:** To look at patella tracking and abnormalities in bone alignment

Treatments

1. Acute Treatment

The patella often relocates itself spontaneously after an episode of dislocation. If it does not, your doctor may have to manually put the kneecap back into the groove.

Rest, Ice, Compression and Elevation (RICE) helps to reduce pain and swelling.

2. Immobilisation

After putting the patella back in place, the knee is immobilised in a backslab or knee brace. The period of immobilisation can vary between 2 to 6 weeks depending on the severity of the injury.

3. Medications

Pain-relieving medications, including non-steroidal anti-inflammatory drugs are often prescribed to reduce pain and swelling.

4. Physiotherapy

Most patella dislocations or subluxations (partial dislocations) are effectively managed with physiotherapy to strengthen the quadriceps muscles.

5. Surgical Treatment

If the initial injury produces a loose piece of bone and/or cartilage, surgery may be required to remove or fix the fragment.

This may be performed by mini-open surgery or by arthroscopic "key-hole" techniques.